# **Installation Guide**

Wyse® R Class Conversion to Xenith Pro

Wyse® USB Firmware Tool™ Release 1.18

Products: R10L, R50L, R90L, R90LW, R90L7

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#### **Ordering Information**

For availability, pricing, and ordering information in the United States and Canada, call 1-800-GET-WYSE (1-800-438-9973) or visit us at **wyse.com**. In all other countries, contact your sales representative.

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# 1 Introduction

This guide provides the instructions you need to use Wyse<sup>®</sup> USB Firmware Tool to convert the following Wyse R class thin clients to Xenith Pro:

- R10L
- R50L
- R90L
- R90LW
- R90L7

**TIP**: After converting your thin clients, obtain any available firmware update at <a href="http://www.wyse.com/serviceandsupport/support/downloads.asp">http://www.wyse.com/serviceandsupport/support/downloads.asp</a>.

# **Kit Contents**

The conversion kit includes:

- Conversion Software Assembly DVD-ROM
- Wyse Conversion Labels (you must attach a Wyse label to each converted thin client)

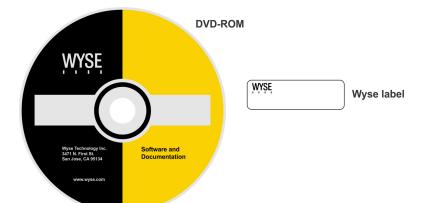


Figure 1 Kit contents

The Conversion Software Assembly DVD-ROM contains:

- A PDF of this Installation Guide
- Wyse USB Firmware Tool Release 1.18
- RX0 Xenith Pro Conversion Image folder containing the following files: bios.img cmos.img commandsXml.xml par1.img

# **Wyse Technical Support**

To access Wyse technical resources, visit <a href="http://www.wyse.com/support">http://www.wyse.com/support</a>. If you still have questions, you can submit your questions using the Wyse Self-Service Center at <a href="http://support.wyse.com/selfservice.html">http://support.wyse.com/selfservice.html</a> or call Customer Support at 1-800-800-WYSE (toll free in U.S. and Canada). Hours of operation are from 6:00 A.M. to 5:00 P.M. Pacific Time, Monday through Friday.

To access international support, visit <a href="http://www.wyse.com/global">http://www.wyse.com/global</a>.

#### **Related Documentation and Services**

Fact Sheets containing the features of hardware products are available on the Wyse Web site. Go to <a href="http://www.wyse.com/products">http://www.wyse.com/products</a> and use the *Cloud clients* tab to locate and download the Fact Sheet for your hardware product.

Administrator and other documentation for your cloud client model are available at: <a href="http://www.wyse.com/manuals">http://www.wyse.com/manuals</a>.

# **Wyse Online Community**

Wyse maintains an online community where users of our products can seek and exchange information on user forums. Visit the Wyse Online Community forums at: <a href="http://community.wyse.com/forum">http://community.wyse.com/forum</a>.

# 2 Installing Xenith Pro Firmware

This chapter includes the requirements and procedures you need to install and use Wyse® USB Firmware Tool<sup>TM</sup> to update your thin client to Xenith Pro firmware.

**TIP**: The purpose of the Wyse USB Firmware Tool is to configure a bootable USB key for device firmware. In the following procedures, you will create a configured USB key containing the firmware contents that you need, and then boot from this configured USB key on the thin clients you want to convert to push the contents of the USB key onto these *target* devices.

# Requirements

- Machine with a *minimum of 16GB of free space* running either of the following:
  - · Windows 2003 Server
  - · Windows Server 2008
  - Windows Server 2008 R2
  - · Windows 7 Enterprise (32-bit and 64-bit)
  - · Windows 7 Ultimate (32-bit and 64-bit)
- USB Key:
  - USB 2.0 only
  - USB key size should be 16 GB (see also "USB Keys Troubleshooting Boot Issues" on page 9)

**CAUTION**: During the USB key configuration process the USB key will be reformatted.

# **Procedures**

**IMPORTANT**: Complete the following procedures as an administrator (administrator privileges are required).

Step 1: Copy the RX0 Xenith Pro Conversion Image Folder (on the DVD-ROM) to Your Local Hard Drive

Navigate to the *RX0 Xenith Pro Conversion Image* folder (contained on the Conversion Software Assembly DVD-ROM) and copy it to your local hard drive.

Step 2: Install Wyse USB Firmware Tool v1.18

- Navigate to the Wyse USB Firmware Tool v1.18\_GA.exe (contained on the Conversion Software Assembly DVD-ROM) and double-click it to execute the file and open the WinZip Self-Extractor dialog box.
- Enter the destination folder you want (for example, C:\USBFT) in the Unzip to folder box, and then click Unzip to extract all files from the Wyse USB Firmware Tool v1.18\_GA.exe file into the folder. The default directory for the extracted files is Wyse USB Firmware Tool.

**CAUTION**: It is not recommended to use your desktop for the destination folder as there are several files that will be extracted from the .exe file.

- **3.** After installation, create a shortcut on the desktop for the *Wyse USB Firmware Tool.exe* file (see your operating system documentation).
- Step 3: Use Wyse USB Firmware Tool to Configure a Single USB Key to Install Firmware

**CAUTION**: For Windows 7 Enterprise and Windows 7 Ultimate operating systems, be sure to right-click on **Wyse USB Firmware Tool.exe** and select the *Run as administrator* option.

 Double-click the shortcut on the desktop for the Wyse USB Firmware Tool.exe file to run the tool and open the Wyse USB Firmware Tool wizard (the welcome page provides the product version and description, and a link to view the Wyse end user license agreement).

Figure 2 Wyse USB Firmware Tool wizard



2. Click **Next** to open the **Select an Option** dialog box.

Figure 3 Configuration options



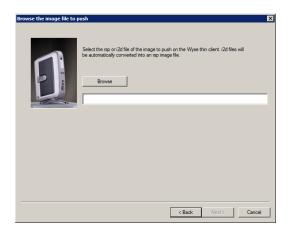
3. Select the Configure the USB key to Copy/Pull or to Update/Push firmware option, and then click Next to open the Select the Configuration dialog box.

Figure 4 Update firmware options



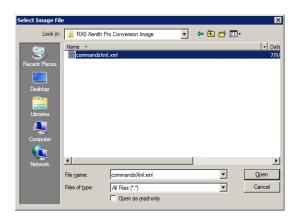
- **4.** Select the **WTOS/Xenith/Xenith Pro** operating system (OS) type option (note that OS *Image*, *BIOS*, and *CMOS* are selected by default).
- **5.** Select the **Update or Push Firmware** operation to perform option.
- 6. Click **Next** to open the browse dialog box.

Figure 5 Browse for image file



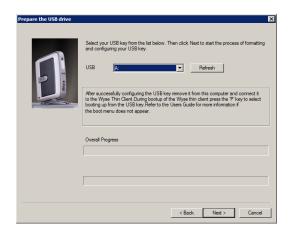
7. Click Browse.

Figure 6 Browse to select commandsXml.xml



- 8. Navigate to and open the RX0 Xenith Pro Conversion Image folder (on your hard drive) that contains the commandsXml.xml file (this is the location you selected in "Step 1: Copy the RX0 Xenith Pro Conversion Image Folder (on the DVD-ROM) to Your Local Hard Drive" on page 4), click on the commandsXml.xml file to select it (you may need to select the All Files option from the Files of Type box to display the commandsXml.xml file for selection), and then click Open.
  CAUTION: Be sure to use the commandsXml.xml file you extracted in "Step 1: Copy the RX0 Xenith Pro Conversion Image Folder (on the DVD-ROM) to Your Local Hard Drive" on page 4; DO NOT use the commandsXml.xml file directly from the Conversion Software Assembly DVD-ROM.
- 9. In the browse dialog box, click **Next** to open the **Prepare the USB Drive** dialog box.

Figure 7 Prepare USB key for configuration



- 10. Select the USB key onto which you want the configurations (you can use Refresh as needed to recognize an inserted USB key), and then click Next. The progress bars show the overall (formatting and configuration) progress and task progress.
  CAUTION: DO NOT interrupt the formatting and configuration process. All process requirements are done automatically. The progress screen may display for several seconds or longer. You can safely ignore any error message.
- **11.** After configuration, click **Finish** to close the wizard and then remove the configured USB key for use (you will use the configured USB key on your *target* devices).

**TIP**: At this time you can also *replicate/duplicate* the configured USB key (containing the firmware you want to push) for simultaneous usage on target devices (by users in several locations at the same time). For full Wyse USB Firmware Tool details, see *Users Guide:* Wyse<sup>®</sup> USB Firmware Tool 1.18.

#### Step 4: Use the Configured USB Key to Install Firmware on Each Thin Client

In this step, you will boot each thin client you want to convert from the configured USB key so that the USB key will *push the contents from the USB key onto the target device*.

- 1. Be sure the client is shut down and disconnected from any network.
- Attach the configured USB key to the client.
- 3. Power on the client and during boot, press and hold the P key.
- **4.** Select the **USB HDD** drive option from the menu (this option also displays the brand of your configured USB key).
- 5. Press Enter and follow the process prompts. When booting a target device from the configured USB key (containing the contents to be pushed to a target device), you will be prompted to continue with the push process (to continue, type y and press Enter). Once the push process is complete, you must reboot (press Enter and remove the USB key).
  - **CAUTION**: DO NOT interrupt the installation/conversion process. All process requirements are done automatically. Some screens may display for several seconds during the process.
- **6.** After a *target* device completes the installation/conversion process *and displays the Xenith Pro desktop*, continue with "Step 5: Verifying Thin Client Operation" on page 8.

#### Step 5: Verifying Thin Client Operation

After the thin client displays the Xenith Pro desktop, you can verify the *System Version* and that your general system information is correct.

- 1. On the *General* tab of the *System Information* window (on the *Wyse Zero Toolbar*, click the *System Information* icon), verify the *System Version* is **2.0\_017**.
- **2.** After verification, close the *System Information* window. The thin client is ready for operation and setup by an administrator.

TIP: Administrator and other documentation for your thin client are available at: <a href="http://www.wyse.com/manuals">http://www.wyse.com/manuals</a>. For step-by-step instructions to configure your zero client to establish a connection to a virtual desktop, see *Administrators Guide: Wyse® Xenith™ Release 2.0*.

## Step 6: Attach a Wyse Conversion Label on Each Converted Thin Client

The conversion kit is supplied with *Wyse Conversion Labels* that must be attached to each thin client. Be sure you have purchased the amount of labels you need. **CAUTION**: Failure to install the labels may cause delays in service and support. The serial number must be given to a Customer Support Technician to validate entitlement to support and service from Wyse. Failure to do so will result in the original operating system being loaded on the device and is in breach of your license agreement.





#### Step 7: Obtain a Firmware Update

If you are under a Wyse maintenance contract, you can download Xenith Pro software updates from your *My Downloads* page in the Wyse Self-Service Center at <a href="http://support.wyse.com/selfservice.html">http://support.wyse.com/selfservice.html</a>. If you are not under maintenance and wish to gain access to Xenith Pro software updates, you must complete a product registration:

- 1. After purchase, you will receive an e-mail containing your software Registration Code.
- 2. Go to the Wyse Self-Service Center at <a href="http://support.wyse.com/selfservice.html">http://support.wyse.com/selfservice.html</a> and log in (or register and log in).
- 3. On the *Home* tab under *Support Resources*, click the **Registration**, **Licenses & Downloads** (\*\*New) link to open the *Registration*, *Licenses & Downloads* page of the *Support and Service Center* tab.
- **4.** Enter the *Registration Code* that you received from Wyse for your purchase in the *Enter Registration Code* box and click **Register**. After the process is complete, the products you registered will display on the page.
- 5. Activate your software maintenance: Click Activate in the Software Maintenance list.

6. Download your software: On the page displaying the products you registered, select Support and Service Center tab > Registration, Licenses & Downloads to open the Registration, Licenses & Downloads page, hover your mouse pointer over the My Downloads link and select Xenith to display available firmware, click the zip file you need (for example, Xenith Pro 2.0.015.zip), and then follow the download instructions. CAUTION: Be sure to select the option in the Xenith Pro 2.0.015.zip file that you need. For example:

**If you are using an FTP server to update your firmware**, be sure to use the *R00 xen* file.

If you are using the USB Firmware Tool to update your firmware, be sure to use the *R00 xen-2.0 015-128-Merlin.zip* file.

**WARNING**: Use of the Software on more than one device requires that you first purchase from Wyse additional copies of, or licenses to, the Software. Contact your local Wyse distributor or Wyse Inside Sales at 1-800-800-9973 option 1 or 1-408-473-1200 option 1.

# **Troubleshooting**

This section contains general troubleshooting information.

# **USB Keys - Troubleshooting Boot Issues**

Due to different manufacturing processes on USB keys (and the variety of them), not all brands have been tested with the Wyse USB Firmware Tool. If you experience problems booting from a configured USB key, it is recommended that you try a different brand of USB key.

## SanDisk Cruiser Flash Drives - Troubleshooting Partition Issues

**Problem:** How can I properly use a SanDisk Cruiser flash drive to image supported devices using the Wyse USB Firmware Tool? (KB17735)

**Solution:** SanDisk flash drives come with support for U3 (for details on U3, see <a href="http://www.u3.com">http://www.u3.com</a>). When you initially use these drives, you are prompted to select the use for the drive: *Apps and Storage* or only *Storage*. If you select the *Apps and Storage* option, the drive will create two partitions, one of which is identified as a CD and is a read only partition. This partition sometimes prevents the Wyse USB Firmware Tool to properly prepare the USB key for imaging a device. To resolve this problem you can do one of the following:

- Go to <a href="http://www.sandisk.com">http://www.sandisk.com</a>, search in the SanDisk Knowledge Base for document **2550**, and then follow the instructions in the documentation.
- Go to <a href="http://www.sandisk.com/DriverDownload/driverList.asp">http://www.sandisk.com/DriverDownload/driverList.asp</a>, select USB Flash
   <a href="https://www.sandisk.com/DriverDownload/driverList.asp">https://www.sandisk.com/DriverDownload/driverList.asp</a>, select USB Flash
   <a href="https://www.sandisk.com/DriverDownload/driverList.asp">https://www.sandisk.com/DriverDownload/dr

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